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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/519,246	03/06/2000	Stuart K. Williams	9896.143.0	8260

55504 7590 07/07/2006

SURMODICS, INC.  
9924 WEST 74TH STREET  
EDEN PRAIRIE, MN 55344

EXAMINER

BARRETT, THOMAS C

ART UNIT	PAPER NUMBER
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3738

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/519,246

Applicant(s)

WILLIAMS ET AL.

Examiner

Thomas C. Barrett

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,6,7,10,11,13,16,17 and 21-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,6,7,10,11,13,16,17 and 21-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5-06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 31, 2006 has been entered.

### ***Response to Arguments***

Applicant's arguments filed May 31, 2006 have been fully considered but they are not persuasive.

The Applicant argues:

"As is known to those skilled in the art there are multiple types of collagen and each have unique structures, function, and properties. For example, it is well known that collagen Types I and III have thrombogenic properties while Type IV is nonthrombogenic. It is also well known to those skilled in the art that Type I collagen must be chemically modified to render it non-thrombogenic. Therefore, it follows that any reference to nonthrombogenic collagen refers to at least modified Type I and/or Type IV. Conversely, reference to thrombogenic collagen means at least Types I and III and/or any other Type (including natural and modified) with thrombogenic properties."

However, the Applicant fails to supply evidence for this statement. Furthermore, Parsons et al ("Diminished Platelet adherence...") discloses that Type IV collagen is thrombogenic.

In column 1, Guire teaches against **rapid** thrombogenic action and states that **ideally**, a biomaterial will not induce blood clotting. Disclosures of non- or less preferred embodiments do not constitute a "teaching away".

The example starting at column 7 does not necessarily refer to all embodiments. In addition, Guire does not disclose the collagen graft as "free of thrombosis". The fibronectin graft was showed no evidence of **significant** thrombosis.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6-7, 10-11, 13 and 16-17 and 21-43 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Guire (4,979,959) in view of Marin et al. (5,443,477). Guire discloses a vascular graft (col. 1, lines 31-32) with a hemostatic (thrombogenic) agent such as collagen (col. 4, lines 28-45) covalently bonded to its surface by the activation of photoreactive groups (col. 2, lines 38-46), wherein the surface can be ePTFE (Example 1) however Guire fails to disclose the vascular graft as part of an endovascular stent-graft. Marin et al. teaches an intraluminal stent that can be reliably and readily affixed to any graft material (col. 2, lines 9-19) thus making an endovascular graft, which permits fixation of the graft to an arterial wall without sewing (col. 1, lines 66-67). It would have been obvious to one of ordinary skill in the art to

Art Unit: 3738

combine the teaching of an intraluminal stent affixed to a graft material, as taught by Marin et al., to a vascular graft as per Guire, in order to permit fixation of the graft to an arterial wall without sewing. Please Note: The method of coating is the same in Guire as in the present invention as admitted by the Applicant (page 17, lines 16-22 of the specification) and therefore inherently has the same properties claimed. Guire also fails to specifically disclose the hemostatic collagen as type I collagen. It is well known to one of ordinary skill in the art that Type I collagen is hemostatic. See, for example, Clapper (5,744,515) column 4, lines 58-60. Therefore it would be obvious to one of ordinary skill in the art to use Type I collagen as the "thrombogenic" agent of Guire.

### ***Conclusion***

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 3738

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas C. Barrett whose telephone number is (571) 272-4746. The examiner can normally be reached Tuesday-Friday between 9:00 A.M. and 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Thomas Barrett", with a stylized flourish at the end.

Thomas Barrett  
Examiner  
Art Unit: 3738